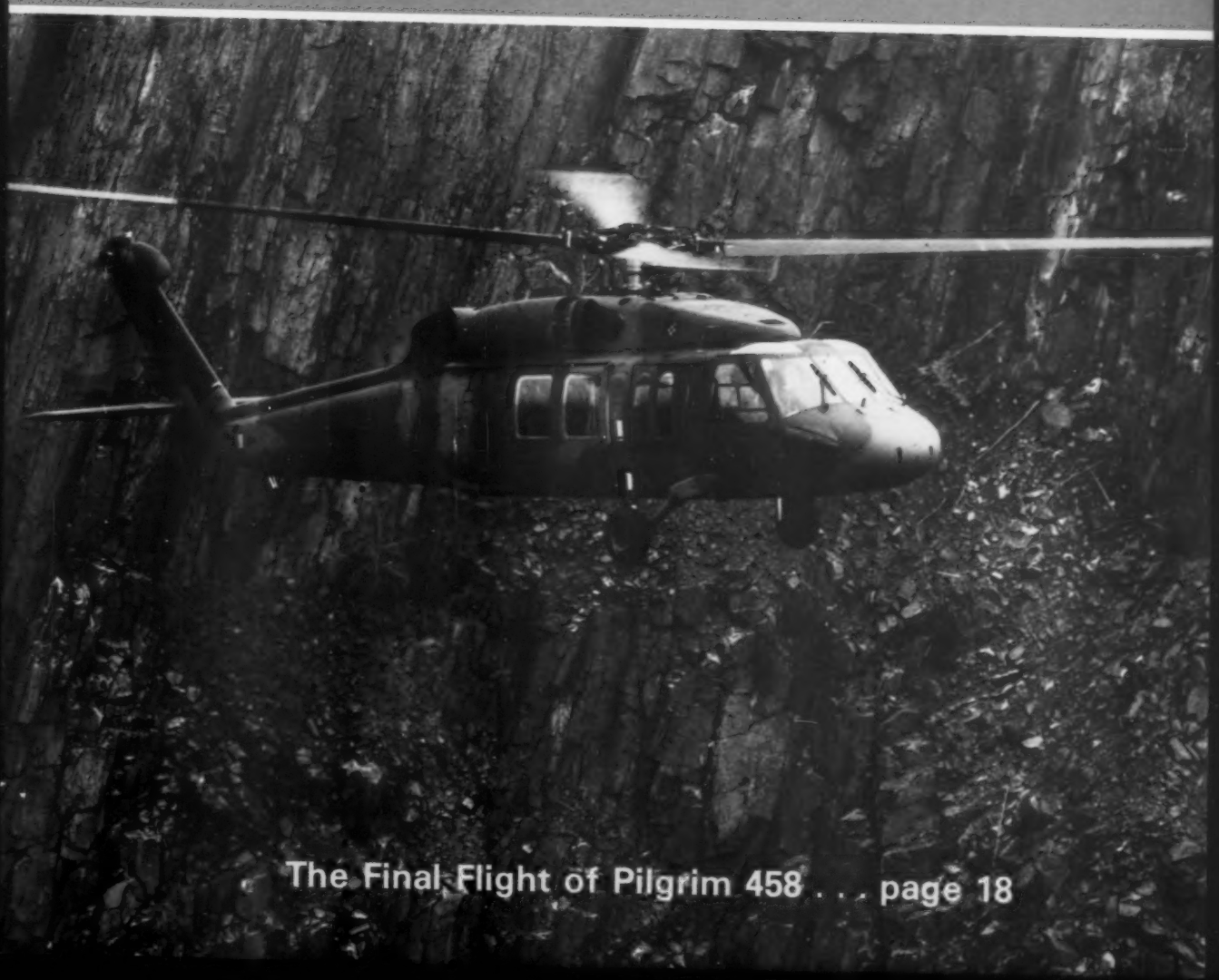
The MAC Flyer

FEBRUARY 1983



The Final Flight of Pilgrim 458 . . . page 18

The MAC Flyer

MILITARY AIRLIFT COMMAND

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For Greater Safety and Efficiency in MAC Air Operations.

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Contributions, comments and criticisms are welcome. Write: *The MAC Flyer,* HQ MAC/IGFE, Scott AFB, IL 62225; or call 618-256-3534, or Autovon 638-3534. The editors reserve the right to make any editorial changes in manuscripts which they believe will improve the material without altering the intended meaning.

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Cover Photo: Sikorsky Aircraft's UH-60A Blackhawk is the new MAC combat rescue helicopter. The first aircraft is now in operational service at the 55 ARRS, Eglin AFB. Photo courtesy: Sikorsky Aircraft.

Have a Heart

That's right! Have a heart and enter the 1983 MAC Flying Safety Writing Contest. Not only can you win someone's heart with your entry, you just might save their life! What better Valentine present can you think of than the gift of life? All you have to do is jot down some thoughts on flying safety and mail them to us. It's really just that simple.

The rules are not complicated. Your prize-winning story or poem must contain a flying safety message and be interesting. And speaking of prizes, everyone who enters will win two prizes—a free C.R. Terror T-shirt and a 1-year free subscription to *The MAC Flyer!* But hurry, one and all! There are only 2 more months before the contest ends. Follow the guidance of the CPRs (certified prize-winning rules) below and send us your heart-stopping tale!

The Rules

The 1983 MAC Flying Safety Writing Contest is conducted according to MACR 900-3 and the following rules. All entries must be original, unpublished and postmarked no later than 31 March 1983. Stories must be between 1,000 and 3,000 words long (about 6 to 14 double-spaced typed pages); poetry should be about 75 to 100 lines. Entries must contain an *aviation safety message.* Manuscripts must be double-space typed and submitted in *two copies.* Identify entries by title only, and attach a cover sheet showing the author's name, address, duty phone number and unit. Also, the cover sheet should contain a brief autobiography.

The contest is open to anyone. Entries qualifying under the above rules earn their author a free C.R. Terror T-shirt *(so indicate your size)* and a free 1-year subscription to *The MAC Flyer.* However, contest prizes (desk sets and plaques) may only be awarded to military and civilian employees of the Department of the Air Force or Air Reserve Forces. Other entrants may be selected for Honorable Mention in a Special Category. All winning stories will be published in *The MAC Flyer.* Entries should be addressed to:

Safety Writing Contest
HQ MAC/IGFE
SCOTT AFB IL 62225

A SAAM mission is loaded and ready for . . .

The Quick Turn

by CMSgt Howard V. Berg, USAF (Ret)

Honorable Mention, 1982 MAC Flying Safety Writing Contest

Master Sergeant Dee Vice, a MAC ALCE (airlift control element) loadmaster, was checking out of his quarters at Fort Swampy when the billeting officer gave him a message to call his unit. Sergeant Vice swore silently. If I call home now, he thought, I'll probably be diverted somewhere else. I've already been down here working with the Army's finest for 2 weeks. A short phone call confirmed his worst fears. Sure enough, his home (the wing combat support branch) had a short notice special assignment airlift mission (SAAM) to support at another Army location. Dee reluctantly threw his bags into the motor pool taxi and proceeded to the airport, not especially relishing the extension of his already too-long TDY.

Meanwhile, on the opposite coast, a C-141 crew was alerted to support SAAM 4669. First they'd stop at Fort Tecumseh, Oregon, to pick up various odds and ends for an exercise in the Pacific, then proceed to Elmendorf AFB, Alaska,for a 24-hour crew rest. Enroute to Fort Tecumseh, the crew discussed at length how MAC officer effectiveness reports and airman performance ratings could make you or break you in the Air Force. The AC planned a short ground time at Fort Tecumseh and briefed his crew on how to get a quick turn at an Army base. He felt it was important not to rock the boat,but to cooperate fully with the folks on the ground.

About 150 miles out, the jumpseat pilot contacted the Fort Tecumseh ALCE and got the outbound load weight. The flight engineer was already in the process of constructing a TOLD (takeoff and landing data) card for the next leg, keeping in mind they didn't want to tanker fuel on the leg to Elmendorf AFB. In the descent briefing, the AC instructed the loadmasters to open the cargo doors during the taxi into the ramp. As soon as brakes were set and chocks installed, the AC wanted loading operations to begin.

Sergeant Vice arrived at Fort Tecumseh about 3 hours prior to the C-141's scheduled ETA and made his contacts with the Army. They assured him all cargo was properly prepared and ready to go. Although exhausted from the trip, Sergeant Vice still made a cursory check of the cargo and everything seemed to be in order. He did, however, notice a pallet that looked a little warped, but it had the required three pieces of dunnage. Well, he thought, he was a little tired and he was probably just imagining the pallet was warped. After all, the pallet placard read 6,500 pounds, which was not enough to be considered a heavy pallet. It was probably just his vision.

He wondered how the Army unit got by with such poorly-maintained scales.

As Sergeant Vice walked back to the operation center, Specialist First Class Stone met him and offered him a cold drink of lemonade and a cool spot to rest until the aircraft arrived. The "green-suiters" had an igloo of the cold stuff in the supply shed and Dee knew he could relax for a few minutes. When Dee entered the shed, he noticed the Army scales stacked by the door. He wondered how this unit got by with such poorly-maintained scales. Boy, did that lemonade taste good! Off in the distance he heard tires screeching on the runway as the Starlizard touched down. He arrived at the ramp just as the marshaller gave the crossed arms sign to the C-141 pilots.

Everything went smoothly. It seemed all the prior coordination with the user had paid off. The onload was ready and a forklift headed toward the C-141 with the first pallet. Dee, watching the start of the loading process, thought, boy, that 'lift must be missing a few aft counter weights. Its

The Starlifter began an unusually slow takeoff roll down the tarmac.

wheels are just barely touching the ground. Oh well, things are moving right along, anyway.

As the ALCE sergeant proceeded to the flight deck to brief the pilot and crew, the ground loading crew was already rolling the first pallet of the onload forward. Sergeant Vice briefed the AC on a cargo weight of 54,000 lbs, as called for in the mission setup. Everything appeared to be going smoothly. The hustling scanner and flight engineer were pumping gas as soon as the last pallet rolled on. Following fuel disconnect, the AC and his trusting right-seater immediately started running the checklist. They urged the loadmaster to hurry and complete the Form F (the weight and balance sheet). The nerve of those guys, thought Sergeant Vice. After all, the loadmasters didn't have a chance to look the load over before it rolled on. Oh well, I'm here. Nothing to worry about. As Sergeant Vice checked the cargo weight, he felt uneasy about the way that forklift had bounced when it brought the pallets to the aircraft. Dismissing that concern, he handed the Form F up and got a blessing from the left-seater. The flight engineer checked the weights one more time and passed it back to the crew loadmasters.

Sergeant Vice took his copy of the Form F from the loadmaster and gave him the completed manifest. This user is really well organized, Sergeant Vice thought. Even their paperwork is in order. Perhaps this add-on mission wasn't so bad after all.

Soon after, the crew door closed and the great bird taxied out. It needed a little extra power to get out of the chocks, but after all, it was at near maximum gross weight with fuel, cargo and the flight lunches. Those guys can really eat!

Sergeant Vice watched the Starlizard taxi into position at the end of the runway. With a sense of satisfaction, he heard the engines begin to spool up as the throttles were advanced. Brakes released, the C-141 began an unusually slow takeoff roll down the tarmac. In a few minutes Sergeant Vice could report another "on-time" ALCE mission to the 22d Air Force operations center. As the aircraft passed his position at the 7,000-foot marker, it was still rolling. Wow, the pilot must be holding it on the deck so he can put on a max performance climb for the boys in green. He had better pull the yoke back soon or he won't clear the trees on that small hill.

A few seconds later, the horrified sergeant watched the Starlifter erupt into a ball of fire at the end of runway 07. His mind suddenly flashed back to the decrepit scales in the shed. He now remembered the missing calibration knobs, the broken handles, and the mud between the pads. Then visions of the warped pallet, and the forklift with the rear wheels barely touching the ground came to his eyes. *How could he have missed all the clear signs?*

ABOUT THE AUTHOR

Chief Master Sergeant Howard V. Berg entered the Air Force in 1960. His diversified Air Force experience includes: KB-50 inflight refueling specialist; C-130, C-141, and C-5 (initial cadre) loadmaster; aerial port; and airlift control element (ALCE). Prior to his retirement in 1982, Chief Berg served at HQ MAC as NCOIC of all ALCE loadmasters in MAC.

MAC INDIVIDUAL FLYING-HOUR MILESTONE AWARDS

10,000

Brig Gen Donald D. Brown, HQ MAC/XP
Lt Col Thomas E. Convery, 728 MAS

5,000

Col John T. Lawell, 21 AF/DO
Lt Col Donald R. Baker, 18 MAS
Lt Col Thurman A. Ballard, 180 TAS
Lt Col John S. Bauchman, 4 MAS
Lt Col Ronald Farrell, 62 TAS
Lt Col Marshall L. Freemyer, 1300 MAS
Lt Col Walter C. Holliday, 337 TAS
Lt Col Gary R. Walston, 136 TAW
Maj Michael D. Jeffers, 180 TAS
Maj John V. Guerin, 18 MAS
Sq Leader Phillip R. Armitage, RAAF, 1400 MAS
Capt Kenneth D. Moore, 11 AAS
MSgt David A. Holder, 136 TAW
MSgt Myron Horwath, 18 MAS
MSgt Paul E. Miller, 18 MAS
MSgt Frank H. Sellers, 76 MAS
MSgt David R. Stringer, 4 MAS
TSgt Martin H. Bartling, 22 MAS
TSgt Jerry M. Brown, 7 MAS
TSgt Earl W. Laird, Jr., 345 TAS
TSgt Edward Moore, 62 TAS

2,500

Capt James M. Patterson, HQ ARRS/DOVH

(Ranks and units are those at time of award. See MACR 900-3 for details on how to apply for your own milestone award.)

Major Scotty White, Prop formation lead pilot, gives serial lead update briefing at Charleston AFB.

437 MAW crews get serial lead update briefing prior to Reforger airdrop. USAF photos by Capt Gene Clouse.

A 21½ hour mission is safely flown during . . .

MISSION: Reforger

82 Airdrop

by Major Douglas S. White, 41 MAS Stan-Eval
and
Captain Gale E. Clouse, Jr. Associate Editor

Except as noted, all photos by Fred Jones, HQ AAVS.

Prop 11 flight, cleared for takeoff," came the steady voice from the Charleston AFB, South Carolina tower. Crews from six SKE-equipped 437 MAW C-141s listened closely. Their aircraft, carrying 82d Airborne Division heavy equipment, were lined up for the start of the largest Reforger airdrop to Germany. It was a beautiful starlit, South Carolina night, as the formation completed its final pretakeoff preparations. The time was 20 seconds before 1 a.m., 13 September 1982, and scheduled takeoff time was less than a half minute away.

Anxiously waiting to launch out of Pope AFB, North Carolina, were an additional three C-141 formations carrying personnel from the Army's crack 82d Airborne Division, Fort Bragg. Included in this group were a 437 MAW 6-ship, a 63 MAW 2-ship, and a 63 MAW 6-ship formation. "Eider flight," the 437 MAW group, would join up with "Prop flight" over Norfolk, Virginia, and follow 5 minutes in trail. "Loon and Dodo flights," the 63 MAW 2-ship and 6-ship groups, respectively, would launch at 0150 and 0155 Eastern Daylight Time, and follow 40 minutes in trail of the Charleston groups.

Complexity of Operation

This 1982 Reforger airdrop was very ambitious compared with the key Reforger mission in 1981. In that exercise (see "Mission: Reforger 81, Feb 82 *TMF*) MAC crews flew a 6-ship C-141 formation from Little Rock AFB, Arkansas, to Rhein-Main Air Base, Germany. In the process, the formation made one aerial refueling (AR) and flew a low-level mission. This year's Reforger, by contrast, would see a 20-ship C-141 launch that would eventually proceed direct to two drop zones in Germany (Golf and Kilo), airdrop personnel and equipment from the 82d Airborne Division, and return *nonstop* to the United States, recovering all 20 aircraft at Charleston. To accomplish the 21½ hour, 8,471 nautical mile flight, three aerial refuelings for each C-141 would be required. The first and third aerial refuelings by KC-10 Extender aircraft would take place over Goose Bay, Canada. The second aerial refueling, taking place on the leg home following the airdrop, would occur over the English channel. There, 20 SAC KC-135s would refuel the 20 Starlifters returning to the U.S. To insure timely weather updates along the Goose AR track, a WC-130 weather reconnaissance bird from the 53 WRS "hit" the first track a few hours prior to the initial launch.

Weather observers from the 2d Weather Wing were in place at Golf and Kilo DZs to provide up-to-the-minute weather reports to the formations.

Launching the Fleet

Senior Master Sergeant Royce Rogers and Staff Sergeant Greg Bourgault, flight engineers on the lead aircraft at Charleston, had preflighted their Starlifter and were ready for the launch. Engine start and taxi for the 6-ship formation proceeded exactly on schedule. During the lineup, Major Ron Durgee, one of two navigators on the lead ship, called out, "10 seconds." Following the execute given on the SKE flight command indicator, Major Scotty White, Prop 11 first element lead, released the brakes at exactly 0100:00 Eastern Daylight Time. Following 20 seconds later, in turn, were each of the remaining five C-141s of the formation. After an intermediate level off at 5,000 feet for assembly, the formation began its climb to flight level 330.

First Aerial Refueling

The Eider, Loon, and Dodo formations also launched on time and began their flight to Germany. Three and one-half hours after takeoff, Captain Jim Kirby, Prop 11 copilot and squadron flight examiner, began the first KC-10 refueling. Some 19 minutes and 65,000 pounds of onload later, Captain Kirby disconnected, dropped back, and moved left to let Prop 12, with pilot Colonel Jack E. Keater, Jr., 41 MAS commander aboard, take its turn to refuel. All 20 C-141s had successful refuelings during the first AR. Following the first refueling, each C-141 had enough fuel to make the airdrop and land at a European base. Had there been a C-141 that didn't complete its aerial refueling, it would have diverted to Goose Bay.

Climbing back to cruise altitude, the Prop formation winged its way safely across the Atlantic. Weather, intelligence, and command and control information updates were provided to the four sections through special communication equipment installed on each of the C-141 section lead aircraft. Two UHF tactical satellite terminals (SATCOMs) and two UYA-7 digital HF communications systems were used for this purpose.

TOT: 28 Seconds Early

Leaving the United Kingdom, the Prop formation made an enroute descent into Germany and entered the Bravo low-level route at Norvenich at 230 knots and 4,000 feet MSL. Placing the C-141 INSs into the airdrop mode, the navigators, Captain Randy Brooks and Major Ron Durgee,

C-141Bs head home after completing an important airdrop over West Germany as part of Autumn Forge 1982 exercises.

quickly located the initial point (IP). Passing the IP, the crew began their slowdown checklist, as the Starlifter slowed to 150 knots and the rear doors were opened. Staff Sergeant Mark Smith and Technical Sergeant Darrell Harp, loadmasters on the lead plane, had carefully inspected and reinspected a three-platform sequential heavy equipment load which included a howitzer, a jeep, and an Army gamma goat (1½ ton vehicle) weighing a total of 32,000 pounds. On the howitzer was a placard honoring Chief Master Sergeant Monty G. W. Nicholson, 437 MAW, who perished in a Starlifter mishap in August 1982. (See Nov 82 *TMF*, "After Deadlines," page 31.)

As the formation approached Golf DZ, the combat control team gave it clearance to drop. At the "green light" call from the navigator, the copilot punched the green light and simultaneously flicked the chute release switch, beginning the extraction process. The time of the actual drop, 1519:32 Zulu, was only 28 seconds ahead of the scheduled 1520 Zulu TOT (time over target).

All six aircraft in the formation reported "winchester," the code word for load clear. Eider, Loon, and Dodo flights also dropped within 30 seconds of scheduled drop time. A total of 1,083 troops and 83 tons of equipment were delivered. Only one problem occurred when one C-141, which was to have airdropped on Golf DZ, had to

Lt Col Walter McCants, 14 MAS/CC (left), Col John Swonson, Jr., 63 MAW/DO (center), and Col Donald Logeais, 437 MAW/CC and airborne mission commander (right), discuss the completed Reforger airdrop at Charleston AFB.

Flight Lieutenant Dave Gale, RAF exchange pilot with 41 MAS, offloads bags after the long 21½ hour flight. USAF photo by Capt Gene Clouse.

land at Rhein-Main Air Base to offload 45 paratroopers due to a malfunctioning troop door spoiler.

Heading Home!

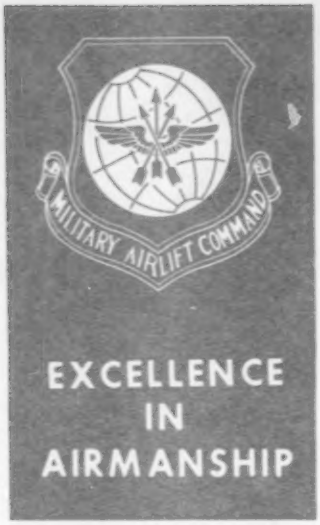
Following the drops, the now empty C-141s made their drop zone escape and began a climb back to altitude to rendezvous with the tankers. During the subsequent refueling, 19 C-141s met 20 KC-135s off the east coast of the United Kingdom and each C-141 onloaded 80,000 pounds of fuel. After the second air refueling, another C-141 diverted to Keflavik, Iceland, due to maintenance problems. Various crewmembers took advantage of the 5-hour lull until the next refueling over Canada by getting some well-deserved and needed rest.

Recovery at Charleston

The last C-141 refueling over Canada was accomplished safely with the KC-10s, and the C-141s were soon on their last leg home. As the 18 remaining C-141s flew an overhead recovery pattern at Charleston, a throng of well wishers waited on the ramp to greet and congratulate the crews for a job well done. As Prop 11 touched down on runway 15, its 41st MAS crew let out a cheer. As it and the other C-141s taxied into parking, one could feel the excitement rising. Among those on hand to greet the returning crews was Lieutenant Colonel Cal Moore, 41 MAS operations officer.

Each crewmember, active duty or reservist, was aware of the magnitude of MAC's achievement during this aerial refueling and airdrop mission. Each had played a major part in making it happen. In addition to the MAC and SAC aircrews who flew the mission, there were many others whose work was crucial to the 20-ship drop. A partial list includes MAC and SAC maintenance folks; deployed Air Weather Service personnel; Aerospace Rescue and Recovery Service flying and ground crews; the 322d Airlift Division at Ramstein; the 3rd Mobile Aerial Port Squadron at Pope; air traffic control; the Headquarters MAC, MAC AF and wing mission planners; and countless others.

A quick debriefing was held for the returning C-141 crews in which Colonel Logeais, the 437 MAW wing commander and the airborne mission commander, read a message of appreciation from General James R. Allen, CINCMAC. All the crewmembers were proud of their accomplishment, and now it was time for some well-deserved sleep. The Reforger 82 airdrop had been a team effort that displayed MAC's significant combat capability to the world. *TMF* salutes all those who participated in and safely executed the Reforger 82 airdrop.



Left to right: SSgt Robert I. Myers, FE; Major William J. Larson, FEAC; and TSgt Kenneth F. Lyman, FE.

Major William Larson, Technical Sergeant Kenneth Lyman, and **Staff Sergeant Robert Myers, 443 MAW,** had just departed Altus AFB on a C-141 local training sortie. Major Larson, the flight examiner, was in the right seat and an aircraft commander candidate was in the left seat. All was normal until the first missed approach when the gear handle was raised. As the handle was raised, the Starlifter shook noticeably and the gear indicator showed an "in transit" condition. Sergeant Lyman scanned the gear and found the left gear to be partially retracted, the gear actuator fully retracted and the yoke and adapter fitting broken. Major Larson initiated a conference skyhook with 443 MAW stan/eval. All agreed the best course of action was to depressurize the number 2 hydraulic system and manually lower the gear. When the gear was lowered, the forward axle was approximately 80° out of position and almost directly below the aft axle. With the left main gear hanging in this position, there was a good possibility the mains would fail upon touchdown, tear away from the aircraft and cause extensive damage to the C-141, besides jeopardizing the crew's safety. The only thing left to do was to repressurize the hydraulic system and try to ease the crippled Starlifter back down.

Major Larson flew a perfect approach and maintained a minimum sink rate throughout the landing. As the left main forward wheels touched down, they bounced slightly and slowly rotated forward to the normal position. The aircraft was stopped on the runway and shut down.

The professional skills exhibited by Major Larson and his crew prevented a major aircraft mishap and saved the lives of those on board. *TMF* salutes this crew's excellence in airmanship.

Major Joe Neill, Master Sergeant Owen Conlin, and **Technical Sergeant Bobby Sollis, 56 MAS,** were on a routine copilot training mission at Altus AFB. After a touch-and-go landing, Major Neill, the IP in the right seat, took control of the C-5 to demonstrate an approach maneuver. Just then, the Galaxy shook with a loud explosion, apparently from the left side of the aircraft, and at the same time, yawed violently. The student copilot in the left seat visually confirmed the number 1 engine had just exploded, the cowling doors had blown off and that a fire was now raging in the engine. Sergeant Conlin, the flight engineer, saw the engine indications drop completely off scale and confirmed these indications with the pilots. Calling for an immediate engine shutdown, the crew carried out the emergency procedures flawlessly and discharged both engine fire bottles into the fire. Sergeant Conlin continued to dispense nitrogen into the affected wing and pylon in an attempt to extinguish, or at least contain the blaze. Meanwhile, Major Neill was bringing the stricken airlifter back around the pattern for an emergency landing at Altus.

With all their firefighting efforts seemingly in vain, the crew accelerated the C-5 to 230 knots in one final attempt to blow out the fire. This, too, failed and the crew realized their only hope was to land as soon as possible. Rather than repressurizing the blazing engine's hydraulic system, which was needed to lower the nose and aft main landing gear, the crew elected to use emergency extension procedures. Again, perfect application of Dash One procedures and extensive C-5 systems knowledge enabled the crew to safely extend the gear on final and land the stricken Galaxy.

With the aircraft now stopped on the runway and the parking brake set, Major Neill, Sergeants Conlin and Sollis shutdown the remainder of the C-5's systems and evacuated the plane. The fire department was finally able to bring the engine fire under control and prevent further damage to the C-5.

The outstanding crew coordination, knowledge of aircraft systems and calm professional actions of Major Neill, Sergeant Conlin and Sergeant Solis were directly responsible for the safe recovery of a valuable aircraft and, more importantly, saved the lives of those on board. Their teamwork during this critical inflight emergency reflects the highest excellence in airmanship.

Left to right: Major Joe E. Neill, IP; MSgt Owen L. Conlin, FE; and TSgt Bobby D. Sollis, IFE.

Terminal Approach

by 1st Lt Johnny W. Blair
OL-C, Airlift Communications Division
Albrook Air Station, Panama

All too often, we take for granted the myriad letters used to designate this agency or that directorate. AFCC, MAC, ASD, DOV, DOT and IG—the list goes on indefinitely! Just as often, we also take for granted the important functions certain agencies perform that make our lives easier and safer as MAC flyers. One such example is the Airlift Communications Division, or ACD. You may have only recently heard of this "entity," or you may have never heard of it. But if you have graced the sunny shores of Central or South America within the past few months, you can rest assured your trip was made safer by their presence "south of the border." First things first, though.

ACD is many men and women insuring that airlifters all over the world can communicate and navigate more efficiently and safer than before. ACD was activated on 1 June 1981 as an intermediate headquarters of the Air Force Communication Command (AFCC). Although aligned under AFCC, the ACD commander is also Deputy Chief of Staff for Communications and Air Traffic Services, MAC. In short, he wears two hats and works for both the commander, AFCC and CINCMAC.

South of the Border, ACD-Style

One example of the daily work ACD does can be found in Panama, home of Operating Location "Charlie," or OL-C. With the exception of Guantanamo Bay and Bermuda (Navy), and Puerto Rico and the Virgin Islands (FAA), OL-C is the USAF office of primary responsibility for all high and low altitude USAF Terminal Instrument Procedures (TERPS) requirements in the Caribbean, Central and South America. In all, OL-C is responsible for the approach procedures in roughly 30 countries and over 50 separate locations where MAC flies regularly.

The complexity of publishing an approach

procedure, for instance, is just one of the things OL-C does. It's also one of the most important jobs anybody has, and for obvious reasons, you will soon understand why.

To go about building an approach for a given location in this massive area, OL-C must first receive permission from the individual host nation to adapt that country's instrument procedures to

Development— ACD and TERPS

meet U.S. TERPS criteria. Many of the countries develop their procedures using AFM 55-9, the U.S. standard for TERPS. But an equal number of countries use procedures for air navigation services aircraft operations, or PANS-OPS for short. Some countries even use their own brand of procedures approved by the ICAO. Needless to say, these procedures don't always meet the stringent U.S. criteria. In any case, the TERPS specialists at OL-C then apply TERPS criteria to the procedures, regardless of their origin. Once this is done, suitable minimums are developed, but never lower than what the host nation has prescribed.

To keep an eye on the procedures in all of Central and South America, OL-C must have continuous, reliable information on nav aids and host nation procedures status. Besides mail, teletype, HF radio calls and NOTAMS, the MAC communicators conduct numerous TDYs to keep host nations informed on just what the Department of Defense (DOD) is publishing and to resolve problem areas.

Once permission to publish has been granted and all necessary airfield data has been accumulated, the TERPS specialists must compile map drawings as required in AFM 55-9. These map drawings identify obstacles that affect landing/take-off minimums at the airfields. The maps are also the basis for each procedure prior to placing that procedure on the appropriate AF or AFCC form.

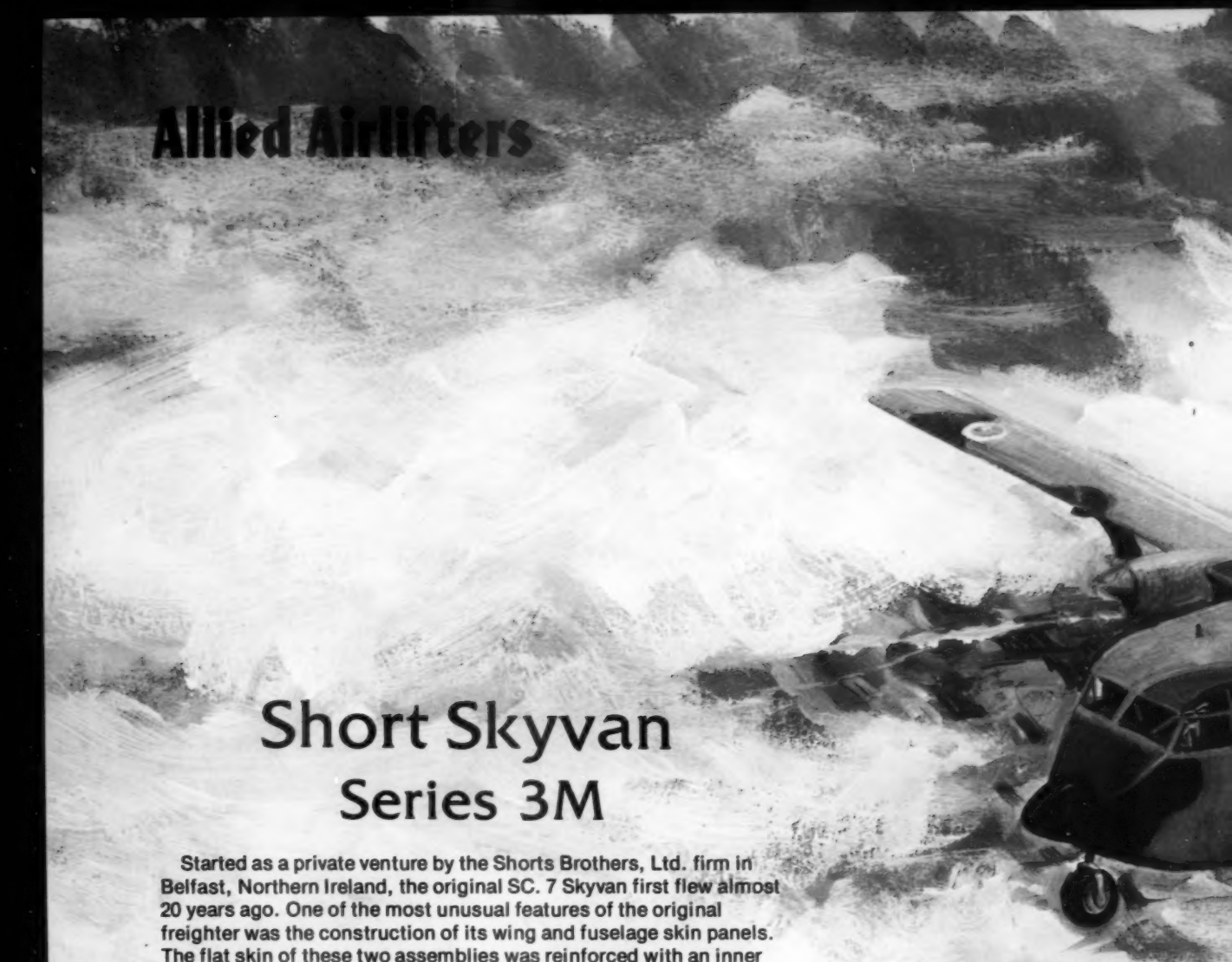
Next, a flyability/suitability check must be conducted to insure the approach procedure is appropriate for the aircraft for which it is intended. Normally, these checks are conducted by Volant Oak C-130s and 437 MAW C-141s, the primary USAF aircraft operating in the Latin America theater. The checks aren't difficult to perform, but they may be difficult to obtain. To allow for safety factors, the checks must be flown in daylight VMC. To complicate matters, mission requirements don't always allow a daylight approach or departure. Approval to fly the procedure must also be granted by the host nation air traffic control personnel and, just like in the states, high density traffic situations may preclude approving the check. Coordination may indeed be difficult at times, but let's assume the check is completed and everything goes satisfactorily.

After a procedure is adapted to TERPS criteria, the forms and all necessary data are forwarded to ACD Air Traffic Services for coordination prior to sending them to the Defense Mapping Agency Aerospace Center (DMAAC) in St. Louis for publication. Next stop for the newly approved approach/departure procedure—your pubs bag!

A question frequently asked is why create new DOD-published approaches when published approach procedures are available from Jeppesen? Answer: Safety! Aircrews operating with Jeppesen procedures should not be lulled into a false sense of security believing they meet U.S. TERPS criteria. They may or may not. As stated earlier, U.S. TERPS criteria has not been applied by the host nation to the source material in all cases. Another important point to remember concerns timeliness. Jeppesen revisions are mailed weekly, while DOD Flight Information Publications are incorporated in the NOTAM system.

One more word of caution from our friends at ACD. Since 1982, the USAF has adopted Standard Instrument Departure (SID) Criteria incorporated in AFM 55-9. MAC flyers should have noticed this caveat in DOD SIDs: Note—DOD SID criteria for the Caribbean and South America has not been applied. All over the world, but especially south of the border, airlifters using these SIDs should pay particular attention to terrain clearance and enroute altitude requirements. DOD criteria is currently being applied to these procedures and the note will be deleted as new SIDs are published.

Well, there you have it. ACD is not just another three-letter identifier for a multi-syllabic nonentity. The Airlift Communications Division has a tough mission which directly affects every MAC flyer. And even though their activities are as widely spread as MAC itself, think about ACD's work the next time you fly into Panama, Montivideo, Quito, or any place MAC goes! ★



Short Skyvan
Series 3M

Started as a private venture by the Shorts Brothers, Ltd. firm in Belfast, Northern Ireland, the original SC. 7 Skyvan first flew almost 20 years ago. One of the most unusual features of the original freighter was the construction of its wing and fuselage skin panels. The flat skin of these two assemblies was reinforced with an inner corrugated skin, and then hot-bonded together. The original SC.7 also started life with a pair of 390 hp Continentals. It was later refitted with a pair of Astazou turboprops of 637 hp. Later production Series 2 SC.7s were fitted with Astazou XII turboprops, but all subsequent aircraft were fitted with Garrett TPE-331-201 turboprops of 715 shp.

As airlifters go, the Skyvan is not very pretty, but the beauty of the short, squat, boxy little turboprop lies inside its slab-sided fuselage. The SC.7 has 120 ft^2 of floor space and almost 800 ft^3 of interior volume. Looking at the flat sides, top and bottom, it's no surprise that the max height and maximum width of the cargo compartment are the same—6½ feet.

The military version of the Skyvan, the Series 3M, can carry 5,200 pounds of cargo for a normal max takeoff weight. It can also accommodate 22 fully-equipped troops or 16 paratroops. One unique feature of the Skyvan is its one-piece aft-loading door which is also the ramp. As with most combat airlifters, the a opened in flight to airdrop men and equipment for the Skyvan consists of two pilots and a loa

With the Garrett engines turning three-blade Skyvan can cruise at around 170 knots at 10,0 wing, drooping ailerons and single-slotted fla "minilifter" good short field performance spec takeoff and landing mode, the Series 3M can b as 780 feet and can stop after a landing run of 5,200 pound payload and 45-minute reserves, has a range of 208 nautical miles. Improved ar of the Skyvan, the 330 and 360, are currently f States with several commuter airlines.

There are approximately 60 Skyvans in servi Among countries operating it are Thailand, Pa and Oman.

the aft ramp/door can be
ment. Crew complement
a loading technician.
bladed Hartzell props, the
10,000 feet. The high
d flaps give the
specs, too. In the short
can be airborne in as little
n of 700 feet. Carrying a
ves, the military Skyvan
ed and enlarged versions
tly flying in the United

service around the world
d, Panama, Indonesia

Mishap with a Moral

The Final Flight

When Pilgrim Airlines Flight 458 lifted off from Groton, Connecticut, that brisk day last February, none of the passengers or crew had any idea of the trial by fire which awaited them in the skies over Rhode Island. Bound for Boston, it was just another commuter flight which had started from New York's LaGuardia Airport.

Taking command of the flight at Groton, Captain Thomas Prinster was very familiar with the route, the plane—a deHavilland Twin Otter—and his copilot. Prinster had joined Pilgrim in 1979 and had accumulated over 6,500 hours, with 2,700 of that in the DHC-6. His first officer,

# of Pilgrim 458

Lyle Hogg, was almost 10 years younger, but Prinster thought highly of him and his skill. First Officer (F/O) Hogg had flown approximately 2,100 total hours with 400 of that in the Twin Otter. Today, February 21, 1982, Lyle Hogg was beginning his 160th day with Pilgrim Airlines.

In the passenger compartment, Harry Polychron, a recently rehired flight engineer for US Air, settled down into his seat in row four. An Air Force Reservist and instructor pilot flying C-123s at Westover AFB, Mass., Polychron was busy filling out his bid for next month's schedule. As with all very junior flight engineers, though, he realized his chances of getting a "good" trip were twofold—slim and none.

Filed down V16 to Millis and then direct Boston, Quonset TRACON (air traffic control) gave 458 a choice of its filed altitude of 7,000 feet or 4,000 feet. Prinster took the latter. On these short legs, he thought, the lower the better. In the "soup" at 4,000 feet and approximately 15 minutes after takeoff, ice began to form on the Twin Otter's windscreen. F/O Hogg activated the windshield washer/deicer system. He expected to see isopropyl alcohol spray onto the windshield ice which would turn the mixture into slush. The windshield wipers would then take care of the rest. Some alcohol did indeed spit out onto the windshield on the left side, but little or none hit the copilot's side. Hogg tried the toggle switch again, holding the switch down a little longer. This time, nothing happened.

Ominously, the unmistakable smell of alcohol filled the plane. Then, a thin wisp of gray smoke appeared through the cockpit floor. Each pilot instantly knew what that meant—*fire!*

"Quonset, Pilgrim 458. We need direct Providence—this is an emergency." Prinster took immediate and decisive action indicative of his 6,000+ hours in the air. Quonset asked if that was Pilgrim 458 which had called. Again, Prinster repeated his plea. "Directly to Providence, please—this is an emergency—there is a fire on board." Instantly, the controller gave the stricken Otter a heading of 150° for radar vectors to Providence. By now, the smoke was thick, black, and choking.

Prinster had already started a descent by this time, and both pilots simultaneously opened their side windows in an attempt to draw the smoke out of the cockpit. Just as the deHavilland broke out of the overcast, the smoldering fire turned into a raging inferno on the cabin floor.

In the back, the passengers realized something was wrong when the first whiffs of alcohol and the thin gray smoke had filtered into the passenger section. Polychron, his Air Force training and a strong desire for self-preservation taking over, took a coat and attempted to smother the blaze. When the smoke thickened, he took his tennis racket, turned the handle toward the cabin windows and started to knock them out, one by one, trying to draw the smoke away from the pilots. He then returned to the fire, trying to smother it again. But every time he raised his coat from the fire, the flames would leap back to life, each time fiercer than before.

The intense heat was beginning to take its toll on the pilots who, by this time, were literally flying with their heads out the side windows in an attempt to see the ground. Polychron was now severely burned on his left leg, but kept fighting the fire. He yelled into the cockpit, "You guys keep flying. We've got everything under control back here." Hogg never heard that, but about that time, reached behind his seat for a fire extinguisher. He jerked his hand back in agony as he touched the metal canister—the extinguisher was too hot to handle!

Not only was the metal around them literally searing hot, but by now the pilot's wool/dacron uniforms were melting, sticking to their skin. Suddenly, directly ahead of the blazing Twin Otter was an ice-covered lake—Scituate Reservoir. Prinster had managed to lose 4,000 feet of altitude in less than 2 minutes. Now, however, even the *seconds* counted.

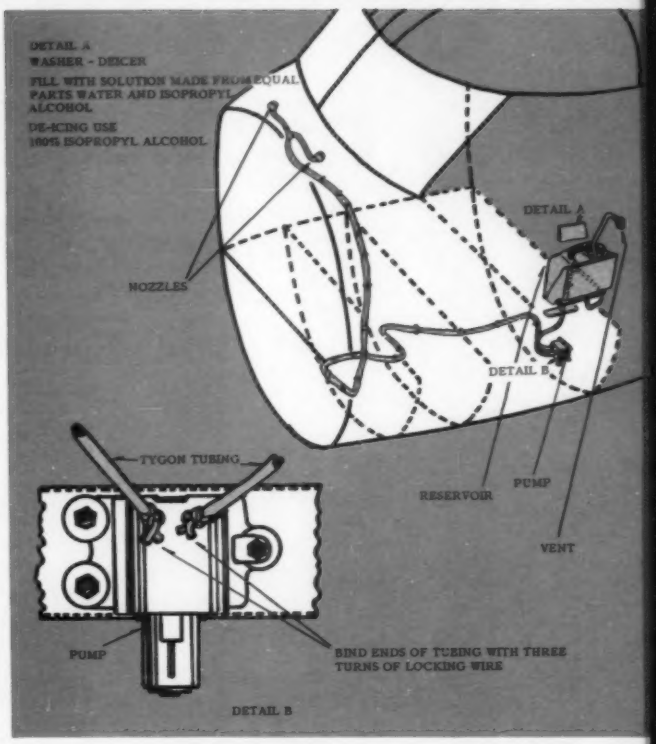
With an impact force described as "violent" and "hard," Prinster slammed the deHavilland onto the frozen lake with such force the right wing and main gear completely separated from the fuselage. The smoking, burning hulk skidded to a stop after a 500 foot slide on the 10 to 12-inch thick ice.

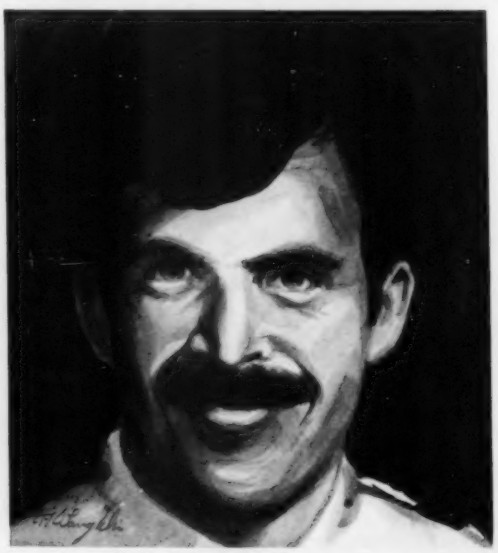
The force of the crash opened a gash just aft of the main door in the rear of the fuselage. Most of the passengers were able to find their way through the smoke and out of either a hole or a door. One 9-year old girl had to be carried from the wreckage by another passenger.

Harry Polychron, unable to get to a seat and strap himself in prior to the impact, had been slammed up against the bulkhead. Now the pain from a dislocated shoulder and a damaged knee, as well as the burns on his leg, welled up inside him as he groped for a way out. He also heard a woman calling for help. Polychron found the woman, who was blind, grabbed her and dragged both himself and the lady out of the burning wreckage. After getting her a safe distance away, he went back to look for others. The excruciating pain in his shoulder and knee, though, were too much for him. Frustrated, he yelled for help.

Hogg had gotten out by opening an emergency exit in the cabin, rescuing two passengers in the process, and was now half-walking, half-stumbling away from the plane. Prinster had escaped the wreck through his left side door's window, and was pulled away from the aircraft by a passenger. As soon as Prinster and Hogg saw the other, each realized the other was horribly burned. Only the cold and shock kept the pain from driving them down into unconsciousness.

Motorists, attracted by the smoke, were now arriving at the scene, and aided in the rescue. Within minutes of the crash, the survivors were in hospitals just 17 miles from the reservoir. Of the 12 people who had been aboard Pilgrim 458, only one—a middle-aged lady—died in the fire, overcome by carbon monoxide and the hot gases generated by the fire.





Investigation

Only hours after the crash, National Transportation Safety Board (NTSB) investigators began sifting through what was left of Pilgrim 458. After months of intense investigation, the board found the cause of the fire which had very nearly spelled doom for the passengers and crew of Pilgrim 458.

In the windshield washer/deicer system, isopropyl alcohol was carried from the 1.5 gallon reservoir to the pump, and from the pump to the spray nozzles via flexible Tygon tubing. After continued exposure to alcohol, however, the Tygon tubing had become hard and inflexible. Sometime prior to the first officer's deicer activation, some of that tubing had apparently come loose from the pump. Consequently, when Hogg moved the windshield deicer switch activating a motor-driven pump, highly flammable alcohol was sprayed into a compartment under the cockpit floor, instead of to the windshield spray nozzles. Then, an engine bleed air duct, cabin heating duct, hydraulic power pump or the windshield deicer pump motor sparked the volatile liquid.

Aftermath

While no one can foresee every possible emergency he or she may ever be faced with, only the foolish will never sit down and at least *think* about what could happen. Periodic review of Section III of our Dash-Ones, thoughtful reflection in a cozy evening chair, and reading about the harrowing emergencies of others are just a few of the ways to prepare for the unexpected. When human design fails, though, proper emergency and personal equipment, and thorough training can fill the gap.

As for the heroes of Pilgrim 458, Captain Thomas Prinster is still in out-patient status, his hands scarred and crippled from the inferno in the cockpit. Lyle Hogg is recovering from his injuries and is looking forward to returning to active flying. Harry Polychron is no longer an Air Force Reservist, but still flying with US Air. But for all the survivors of Pilgrim 458, the scars of this flight will never go away.

—Adapted from NTSB AAR 82-7 and *Professional Pilot*

Harry Polychron is thankful to be alive and still flying—very thankful! The modest commercial flight engineer who, until very recently was an IP in C-123s at Westover, had a few remarks in reflecting back on his brush with death. Polychron shared these thoughts with *TMF*.

"For one thing, the accident taught me that you don't have time to think about a fire when it's actually happening. If you're going to survive, you've got to sit down and think about this emergency, or any emergency for that matter, well before it happens. Be aware of your emergency equipment, know how to operate it and where it is, and know where the emergency exits are."

TMF also asked Polychron if he kept in close contact with the other pilots. "I keep in pretty close contact with both Tom (Prinster) and Lyle (Hogg). Tom's hands were pretty badly burned in the fire. That's one case where the nomex gloves the military has are a definite advantage. If Tom had been wearing the gloves, who knows." Polychron continued on the value of Air Force protective clothing. "I don't think you really appreciate the value of those items (nomex flight suits and gloves, as well as nomex "long johns") until something like this happens. Nomex is where it's at!"

Polychron had just two final pieces of advice for *TMF* readers. "Try to emphasize the use and location of emergency equipment in the plane. Let's face it, whether as a passenger or a crewmember, you'll never know when or where you might have to use that fire extinguisher or crash ax. And of course, pay attention and train hard to be able to get out of an aircraft in a crash situation. Finding an emergency exit, especially in the dark or with a lot of smoke and fumes around, should become second-nature."

For his unselfish acts of heroism during the flight of Pilgrim 458, Harry Polychron was awarded a plaque from the FAA. He was also presented the Air Line Pilots Association's Gold Medal for Heroism!

AWTH's Corner

I Don't Like Smoke!

Primary problems: Diminished concentration, smoke and fumes, crew irritant, errors from illusion.

There's some amount of "gripe" in this one, mixed in with a little common sense and a lack of courtesy.

"Smoking in the cockpit causes a lack of visual acuity (as well as) respiratory problems. During descent after a 6-hour mission, three crewmembers, including both pilots, lit and smoked cigarettes. The cockpit was full of noxious smoke."

This unidentified crewmember does have a valid point. The left-seater should have been particularly conscious of his responsibilities to the crew and set an example by not smoking during this critical phase of flight. And, as we have finally begun to realize, smoking is not "in" anymore. If you have to smoke, though, do it "outside".

The Human Factor in Leadership, or Absence Thereof.

Primary problems/factors: Took unnecessary risk, peer pressure, weather, lack of experience.

Contributing factors: Formation flight, overextended capabilities.

A low-level formation flight. Nothing difficult here, right! Correct, as long as lead knows what he's doing. From the AWTH Form:

"Formation lead pressed too hard in marginal VFR and thunderstorms, resulting in wingmen losing sight of lead. Subsequently, we started our weather penetration and lost wingmen procedures. Radio calls were not heard and resulted in less-than-standard VFR separation during IMC conditions."

WOW! How absolutely, positively dumb! There's no excuse for continuing on into marginal VFR/VMC with other trusting souls on board and behind you. You people who are lead-qualified should always be aware of your responsibilities—that is, after all, why they made you lead-qualified. Everybody has a "hack-the-mission" attitude and that's good. It's what sets us apart from our fellow non-military flyers. Pressing beyond your capabilities with a formation behind you, though, can be deadly. No peacetime mission is so critical as to be worth the loss of one plane or one life, much less a whole formation VFR in IMC. There's no use in training if you come back without airplanes! Like the policeman on a popular TV series says, "Hey! Let's be careful out there!"

High-Density Illusion

Primary problem/factors: FLIP too small, overconfidence, didn't adequately study approach plate.

"I've always wanted to fly into this one particular high density traffic airport," this AWTH starts out. "Whenever I mentioned this to the other pilots, though, they always said no way!" The author goes on to point out what he did wrong.

"Y was a logical fuel stop, so we checked and rechecked, and planned like crazy. We double-checked FLIP, VFR charts, IFR charts, NOTAMS, and weather. It was typical for that part of the country—high overcast, 5 to 7 miles visibility in haze. Still, it was pretty steady VFR. I familiarized myself with all the approaches to the field with the intention of taxiing to the military ramp.

"I became so concerned with figuring out how to find where the ramp was that I didn't really note how the runways were laid out. We got vectors for an ILS to the left runway. The controllers repeatedly asked me if I had the field in sight, but there was too much haze. The sky also seemed to be completely filled with 747s, DC-10s, and L-1011s. Finally, on 3-mile final, I saw the field. For some reason, though, I thought since I was cleared to the left runway, the runway should be on the left side of the field. It's really on the *right* side of the field. I was correctly lined up, but I thought I was way off to the right and about to mid-air with a widebody. Panic stricken, I turned to the left. My crew thought I was berserk and informed me that I really was correct the first time. Tower also noted my mismaneuverings and asked me if I was having problems. If my crew hadn't been so calm, I might have really gone over the left runway and ended up crossing the right runway. Next time, I'm giving the airfield diagram a few more looks."

Editor's Note: Although the pilot of this aircraft said he studied the appropriate pubs thoroughly, his actions tend to indicate otherwise. In this case, more time should have been spent studying the airport diagram and concentrating on the runway layout. Professionalism in the air "lies in what's done—not in what's said." Lucky for this young AC, his crew had devoted more time to careful planning and backed him up in what might have been a critical situation!

Perth International Airport, Australia

(elevation: 66 feet)

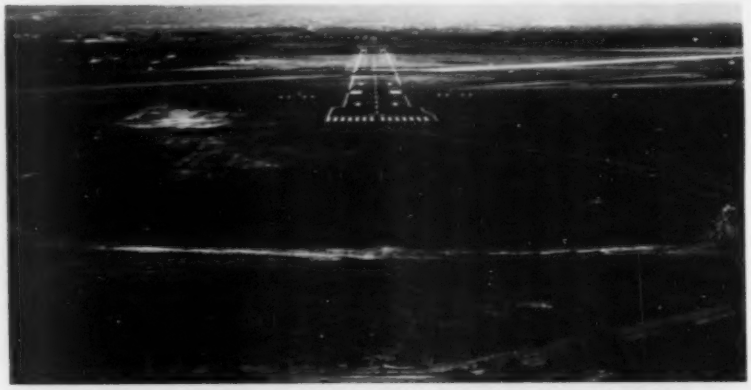
DEJAVU

Located on a flat coastal plain near the west coast of Australia, Perth International Airport is 6 miles northeast of Perth's central business district. The nearest airfields suitable as alternates are Pearce Royal Australian Air Force Base, 16 miles north, and Geraldton Airport, 205 miles north, northwest. The highest point within 25 miles rises to 1,798 feet MSL, and is located 20 miles southeast. Emergency safe altitude within 100 nautical miles of Perth is 3,000 feet.

Perth International Airport has three runways: 02/20, 06/24, and 11/29. To comply with noise abatement procedures, most approaches are flown to runway 20, 11,300 feet long and 150 feet wide; and runway 24, 7,090 feet long and also 150 feet wide.

There is only one DOD-published approach for Perth—the ILS to runway 24. This runway is equipped with the British Calvert approach lighting system, Australian T-VASI, and high intensity runway lights. Jeppesen depicts ILS, VOR, NDB, and NDB/VOR approaches to selected runways at Perth. There are no PAR or ASR approaches available. If you spot any airfield changes not included in the airport qualification programs, please notify MAC AF/DOTs so they can update these programs.

—Adapted from AQP 40165



On short final, runway 06. Notice the short-paved overrrun and the runway's width immediately beyond the threshold.

At 1 mile out, runway 02.

On short final, runway 02. A go-around presents little hazard.

C.R. TERROR

The Terrorific Titan and the tell-tale prop!

Why me? Why is it *always* me?" The Ace of Airlift was just a little perplexed as he contemplated an unwanted and unplanned RON. "Tassels will kill me if I'm not back in time for her birthday party." C.R. looked up at the "bleeding" prop of the C-130 and shook his fist. "It's all your fault, you, you fugitive from a Casablanca fan factory." The Master Manipulator's face reddened noticeably.

"It's not your fault the plane decided to break, Boss," intoned Sammy in an attempt to console the Miffed Major. "After all, as long as there are C-130s, there will be prop changes, right?"

"I suppose you're right, Sammy m'lad. But why the heck did it have to happen to me at this most inopportune time?"

"I think old man Murphy might have had something to do with it, sir," replied Max Torque, C.R.'s trusted engineer. "Anyway, we should be out of here by this time tomorrow. Twenty-First Operations Center promised me faithfully a prop and prop-man were on the way from No Hope AFB. With the helpful reserve technicians here at Westunder, that prop will be changed in no time at all!" But C.R. was still not appeased.

"Why don't we just wipe it down real good and pour some more fluid in it, engineer? Wouldn't that get us home?" he asked hopefully.

"Sir, you *are* the aircraft commander and, yes sir, we could fly this pig like you said," declared Max. "But from my experience, we wouldn't be more than 15 or 20 minutes out before we'd have to shut it down and come right back." C.R. glowered at the giant fan and shook his fist at it.

"Boss, there's no use fretting about it. We might as well find ourselves some quarters and get to bed," the second-seater said soothingly. "Speaking of quarters, does anyone know where we can find a nice soft bed tonight?" A reserve technician standing near the Capable Quintet happened to overhear the conversation and offered the crew his advice. "Excuse me, sir. Might I suggest a small, out-of-the-way road house? It's a bit rustic, but should suit your needs very well."

"Suggest on," encouraged C.R. "Where is this quaint little inn?"

"Well, sir, it's only a short drive out of town and it's doing a ghastly business. It might be just the ticket for you and your crew."

"Sold American!" whooped the Rotund One. "Let's go!"

An *hour* later, the Field-grade Fumbler and his crew arrived in front of the large, clapboard-covered, three-story mansion which had obviously seen better days. As they stood there, the large sign, with a hot dog and a beer stein emblazoned on it, swung to and fro in the night air, creaking as it swung.

"Well this is it. The Frank 'n' Stein Pub," noticed Blinky, as a cloud passed in front of the full moon. A nearby barn owl hooted in the distance, contributing to the crew's uneasiness.

"Why don't we all go inside? It is chilly out here, you know," stammered C.R. With that, the crew collected their baggage and walked up the loose, wooden steps of the old inn and stepped up to the weathered door. Hinges groaning, the creaking door slowly eased itself open, revealing the cobweb-festooned lobby. Except for about a dozen or so candles, the room was devoid of light. Seeing no living soul, Ty Downs, the loadmaster, went up to the front desk and banged the dusty bell.

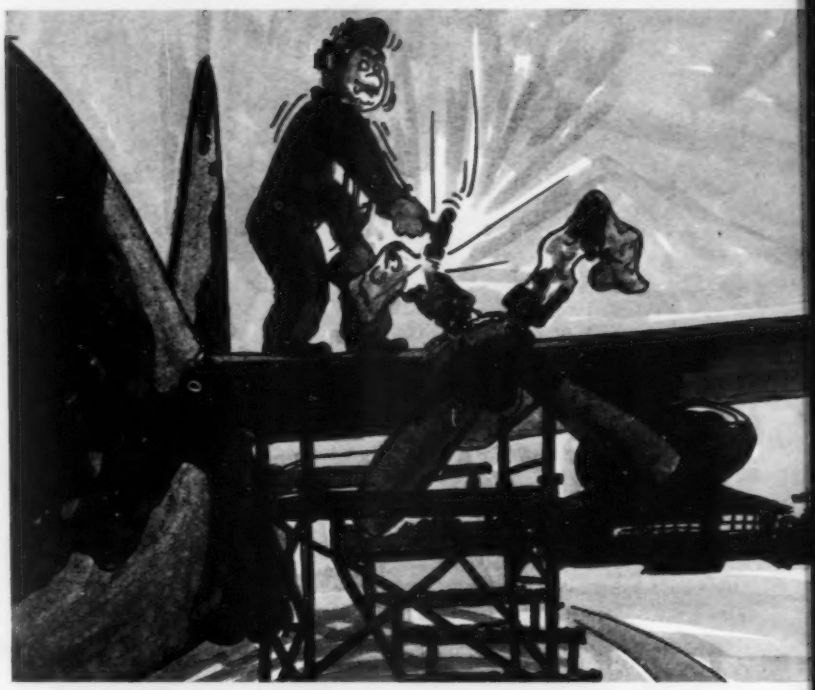
"Is anyone home?" he called out. Immediately, a short, dark form loomed up from behind the desk, very nearly frightening poor Ty to death.

"Yesssss? May I help you?" the form asked. Ty was in such a state of shock, though, he could only stutter.

"Er, uh, (gulp!) We, uh, er . . ."

"My good man," intervened C.R., still irked over the problem prop, "we need some lodging for the night. I hope you have something available?"

"Why, certainly. Certainly. I've been expecting you," replied the heavily-scarred desk clerk. Handing the crew some rusty keys, the clerk continued, "You'll find your rooms at the



top of the stairs. Let's see, that was a single for the major and two doubles, correct?" But before anyone could answer, Sam, Blinky, Ty and Max had snatched the keys from the clerk and were up the stairs and in their rooms, doors slamming behind them.

"My, but they were in a hurry, weren't they, Major?"

"Yes, a bit fatigued, no doubt," replied the Airlift Lothario. "What room am I staying in, my good fellow?"

"Oh, I have a *very* special room for you, sir." The clerk looked mysteriously down at the key he was holding and then at the Morose Major. "This room was last occupied by a famous 19th century author of mystery tales. In fact, he died in this room on this very night—150 years ago. Wah, ha, ha!" laughed the clerk maliciously. "You might have heard of him. He was my great-great-great-great grandfather, Edward Alan Doe."

"No, I can't say I ever recall his books in *my* library," remarked a weary C.R. "Now, if you'll excuse me, I must get to sleep."

A short while later, C.R. was nestled under the giant canopy of an antique feather bed. He drifted restlessly into a fitful slumber as the thought of that malfunctioning prop and the misery it had caused him still preyed on his feeble faculties. His anger continued to grow, though, until he felt he had to do something drastic to rid himself of the improper prop. Sitting upright in the eerie, sinister darkness, C.R. plotted the ultimate demise of the dastardly Hamilton-Standard.

Quietly, C.R. stalked back to the flightline, guided only by the ghostly yellow glow of a full moon. Relying on his cat-like stealth, he slipped past the guards and came upon the culprit—the bleeding prop!

Peeking around the nose of the Herk, he could barely see the fluid still leaking at a steady flow (over 10 drops every 45 seconds). Beneath the prop, the small pool of the red liquid was silently accumulating until the victim, er, prop was devoid of life. It was too much for the Angry Airlifter!

In a fiery rage, C.R. leaped out at the prop, flashlight in hand. Spotting a number 4 ball-peen hammer, the Aging Assassin seized it along with a crescent wrench, and vaulted onto the nearby B-4 stand. He proceeded to strike and restrike the prop dome, smashing it with all his might until, at last, the dome shattered, falling to the concrete below. But the prop continued to leak in defiance of the death-dealing blows. Now angrier than ever, the Murderous Major lashed out at the propeller more violently than before. He twisted and turned and smashed and bashed the prop until every nut, bolt and washer was lying beneath him in the widening puddle of hydraulic fluid. One final blow—the deed was done.

Slowly, ever so slowly, the prop fell from the shaft and crashed to the ground, a final shriek seeming to originate from the shiny metal blades. Now a new thought entered C.R.'s mind—get rid of the evidence. But how? Then it hit him with the force of a runaway guillotine—dismember and bury the dastardly Hamilton-Standard! With a bucket nearby to catch the remainder of the blood, er, hydraulic fluid, the Apoplectic Aviator found a hack saw and started his grisly task. After dismembering the prop into 10 little pieces, C.R. found an old abandoned fuel pit, forced open the doors, and entombed the multilated prop and the bucket of fluid in the cavernous hole. Now, he thought, satisfied at last, I can rest.

Suddenly, two shadow-like figures materialized from the darkness.

"Sorry to bother you, Major, but we heard reports of a scream around here. Do you know anything about that?" asked one of the shadowy, green-suited persons, who just happened to be from a place called St. Ann Eval.

"Why, no I don't, m'lads. I was just about to call it a night after watching the maintenance types change a prop," the Fibbing Field-grader replied, the picture of innocence. "Can't be too careful these days, hey what?" C.R. was outwardly calm in the face of the interrogation. Seemingly appeased, the two flight examiners seated themselves near the abandoned fuel pit and C.R. offered them some tepid coffee.

As he inched forward on his tool chest, the faint sound of an unsynchronized prop, sounding much like the sound of a clock swathed in cotton, began to grow in C.R.'s ears. As he became flushed and broke out in a cold sweat, the prop beat became louder and louder. The two MAC aviators appeared unaware of the pulsating sound, and calmly sipped coffee as they stared at the Portly Pilot. Still, the prop beat grew and grew. The Fidgeting Flyboy began to pace back and forth across the fuel pit which held the remains of his dastardly deed. Each time he crossed the pit, the beat grew louder and louder. It became like a hammer inside C.R.'s tormented mind. Surely, he thought, they must hear it too. Are they deaf?

"Are you nervous, Major?" asked one of the examiners, fixing C.R. with an icy stare.

"Who? Me? Why, what do I have to be nervous about?" C.R. asked innocently. His pacing now increased, and with it, the sound of the beating prop. It grew and increased in intensity until C.R. could stand it no longer. "All right! I did it! I did it! I killed the prop! I couldn't stand it leaking and keeping me away from Tassels!" he screamed. With that, C.R. flung the doors of the fuel pit open to reveal the mutilated results of his deed. "See? Here it is. Here it is . . ."

"Boss? Boss? Wake up! Snap out of it!" Sammy and Blinky shook the Panicked Pilot from his nightmare. "It's all right. It was just a dream."

"I did it. Here it is. What? Who?" stammered the Befuddled Major. "Who are . . . Blinky? Is that you, Sammy? Am I glad to see you two! Where am I, anyway?"

"Calm down, Boss. You're safely tucked in bed at the 'Frank 'n' Stein' inn. You were having a bad dream," continued Sam. "Lucky, the walls between our rooms are so thin, or you might still be dreaming."

C.R., finally realizing where he was, propped himself up on a sweat-stained pillow and recounted his dream to his two trusted companions. "And that was what finally drove me to confess—that tell-tale prop!" he concluded. "But I suppose if I've learned anything from this exercise in terror, it's that you don't try to press home with a broke prop. Right, boys?"

"Well," intoned Sam, "that's right. But what we really need to do is forget this whole incident. Why, it's enough to make old Edgar Alan Doe roll over in his grave."

"Whatever you say, Sammy m'lad. Whatever you say!"

Quick Stoppers

Asleep in the Seat

An individual aboard the HC-130H in "mission essential ground personnel (MEGP)" status was performing scanner duties while enroute to a Pacific base. After 3.2 hours of flight, the crew started their low-level route at 500 feet AGL shortly after crossing the coastline. With the onset of light to moderate turbulence, the MEGP scanner began hyperventilating, passing out almost immediately.

Pararescue specialists from the crew quickly revived and stabilized the now-awake scanner. After landing, the individual was treated and released by the local flight surgeon. The reason for the MEGP scanner's hyperventilating episode remains a mystery, however. Seems the flight surgeon failed to maintain the required record of treatment necessary for all physiological incidents.

A Mind of its Own

The driver of this Herk noticed he was 100 feet low on his drop altitude and executed a smooth climb to regain the lost altitude. As the E-model was in the climb and about 15 seconds prior to the nav's green light call, the heavy equipment load platform decided it was close enough to the DZ and exited the airplane, landing about 1,000 yards short of the drop zone. The locks were checked after landing and locks 2 and 8 checked higher than normal when calibrated. Warner Robins Air Logistics Center is in the process of bringing calibrated test equipment to the field to check the field test equipment used for calibrating the dual rail locks used when airdropping heavy equipment. But this uncommanded load exit incident brings home another lesson: Be careful in the back, for no matter how hard we all try, something can always go wrong when we least expect it.

Frolicking Ultralights

—A Scorpion ultralight struck a cow during a forced landing in the United Kingdom. Seems the magneto lead had separated from the engine, requiring the pilot to land promptly.

—A Quicksilver ultralight hit a car on landing during a demonstration flight at Wymswold, U.K.

—A Skyhawk ultralight crashed into a barn after encountering an updraft on takeoff from a private strip near Broxton, U.K.

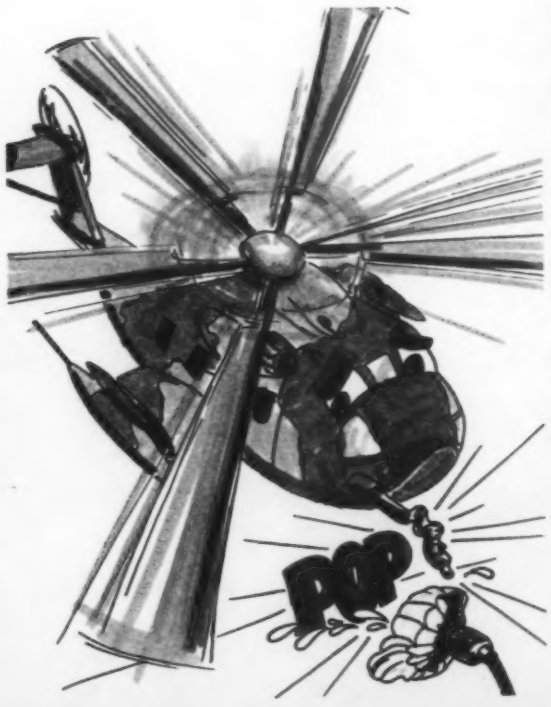
Flying ultralights can be a safe and enjoyable experience. Make sure, however, that both you and your machine are in good working condition. It can be a "moo"ving experience.

—Adapted from *Flight Safety Bulletin*

Turbulent "Twosome"

An HC-130 and HH-53 were flying an air refueling training/currency mission. Rendezvous and join-up were completed uneventfully in light turbulence with the HC-130 clearing the HH-53 in for refueling. The HH-53 moved in, connected to the drogue, and awaited refueling. Both aircraft maintained this position, with the Herk transferring about 3,000 pounds to the Super Jolly. About 4 minutes into the transfer, the turbulence increased, causing the C-130 to roll left, right, left, and finally right again. On the second roll to the right the aircraft and helicopter inadvertently disconnected.

As the drogue came off the probe, the canopy became snagged on the 53's refueling probe nozzle. The canopy then tore loose and collapsed, causing the hose to whip and retract. Refueling was discontinued and both aircraft returned safely to their local airfield. Cost to repair the torn canopy, stretched refueling hose, and damaged refueling probe nozzle—$1,200. Only culprit in this caper was the "turbulent" weather.



OS

Another Rejected Takeoff

Like the title says, another crew found need to reject a takeoff. Rolling past a barrier in their Sabreliner, this crew saw some 9,500 feet of runway remaining in which to slip the surly bonds. Rotate speed was 113 knots with a liftoff speed charted to be 125 knots. At 113 knots, the left-seater rotated to about 8° nose high. At that point, he concluded the miniliner just wasn't accelerating normally and decided it best to call a halt to the takeoff. The amount of runway remaining at the time of the decision was approximately 5,000 feet. Hopping on the binders, the crew brought the hurtling '39 to a stop with only 500 to 1,000 feet remaining. They pulled off the runway onto an adjacent taxiway, shut down the engines and vacated the substandard 'liner. Oh, yes. The fuse plugs in the tires also worked as advertised and left the sickly craft flat-footed.

The maintenance types found several anomalies which, separately, would not have caused this aborted takeoff. Combined, though, they gave the appearance of some pitifully poor aircraft performance. First of all, the engines were found to be out of trim but within tech order tolerances. Next, the elevator control was found to be slightly out of rig. Finally, both airspeed indicators were found to differ by 2 to 5 KIAS, but, again, still within tolerances. Combined, these faults gave the left-seater a false sense of substandard performance and caused him to abort the takeoff. But let's give credit to the crew for this one.

First, they realized something just "didn't feel right." We've all felt that at one time or another. They also knew it was possible to stop their craft in the runway remaining. (Thanks to those runway remaining markers!) In other words, they had their situational awareness out and operating on "max." Finally, they acted unhesitatingly and in a coordinated fashion to carry out their decision to reject before reaching the point of no return.

Notable Quote

"Our safety goal—our safety plea—
Reducing our mishaps in '83."

—The MAC Flyer

AFTER DEADLINES

SPECIAL OPERATIONS COMING TO MAC--It's official. The consolidation of Special Operations and the Aerospace Rescue and Recovery Service (ARRS) becomes official on 1 March. The joint MAC/TAC-developed plan will require no movement of flying units, no major construction and minimal personnel changes. Principal features of the consolidation are:

--HQ ARRS at Scott will be reduced and a new MAC numbered air force established.

--Hurlburt Field, Florida, becomes a MAC base; the 1st Special Operations Wing (1st SOW) becomes a MAC unit; and a Special Operations Forces (SOF) air division is established.

--The new MAC numbered air force will be comprised of ARRS and the new SOF air division.

In addition to these changes, the new SOF air division at Hurlburt will be responsible for the 1st SOW at Hurlburt, the 1st SOS at Clark AB, Philippines, the 7th SOS at Rhein-Main AB, Germany, and the helicopters at Howard AB, Panama.

TWO SAFETY OFFICERS RECEIVE LEADERSHIP AWARDS--The Airlift Association recently named two MAC safety managers as recipients of the Airlift Association's Young Civilian/Officer/Airman Leadership Awards. Among the 36 winners of this award were Capt Lewis H. Evans, 22nd Air Force Safety, and Mr. Robert D. Lyman, an explosives safety manager at the 314th TAW, Little Rock. Selected by their peers, each recipient is awarded a certificate of recognition and a free 1-year membership in the Airlift Association.

FIRST MLS COMMISSIONED--As the old saying goes, the future is now. Valdez, Alaska, has the priviledge of owning the first microwave landing system (MLS) commissioned by the FAA for public use. Operational use of the MLS should greatly improve operators' ability to get into the terrain and weather-restricted airport. Installation of the Bendix MLS lowered the minimums from 3,750 AGL and three miles for the localizer/DME to 1,000 AGL and two miles for STOL operations with the MLS. Frequent operators into Valdez, using STOL aircraft such as the deHavilland Dash 7, may, with FAA authorization, have those minimums lowered even further to 500 and three-quarters. Meanwhile, progress continues on a military MLS.

NEW HELICOPTERS FOR ARRS--Greater range and payload, improved combat survivability and reduced maintenance are just some of the advantages of the new UH-60A Blackhawk, the newest ARRS aircraft. Unlike the older HH-3s and HH-53s, the Sikorsky Blackhawk will be air transportable in C-141Bs as well as C-5As. The first operational squadron to receive the new machines is the 55th ARRS at Eglin AFB, Fla. The HH-3E Jolly Greens now assigned to the 55th are being transferred to the 33d ARRS at Kadena AB, Japan.

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"Okay, you airlifters, let's be careful out there!"

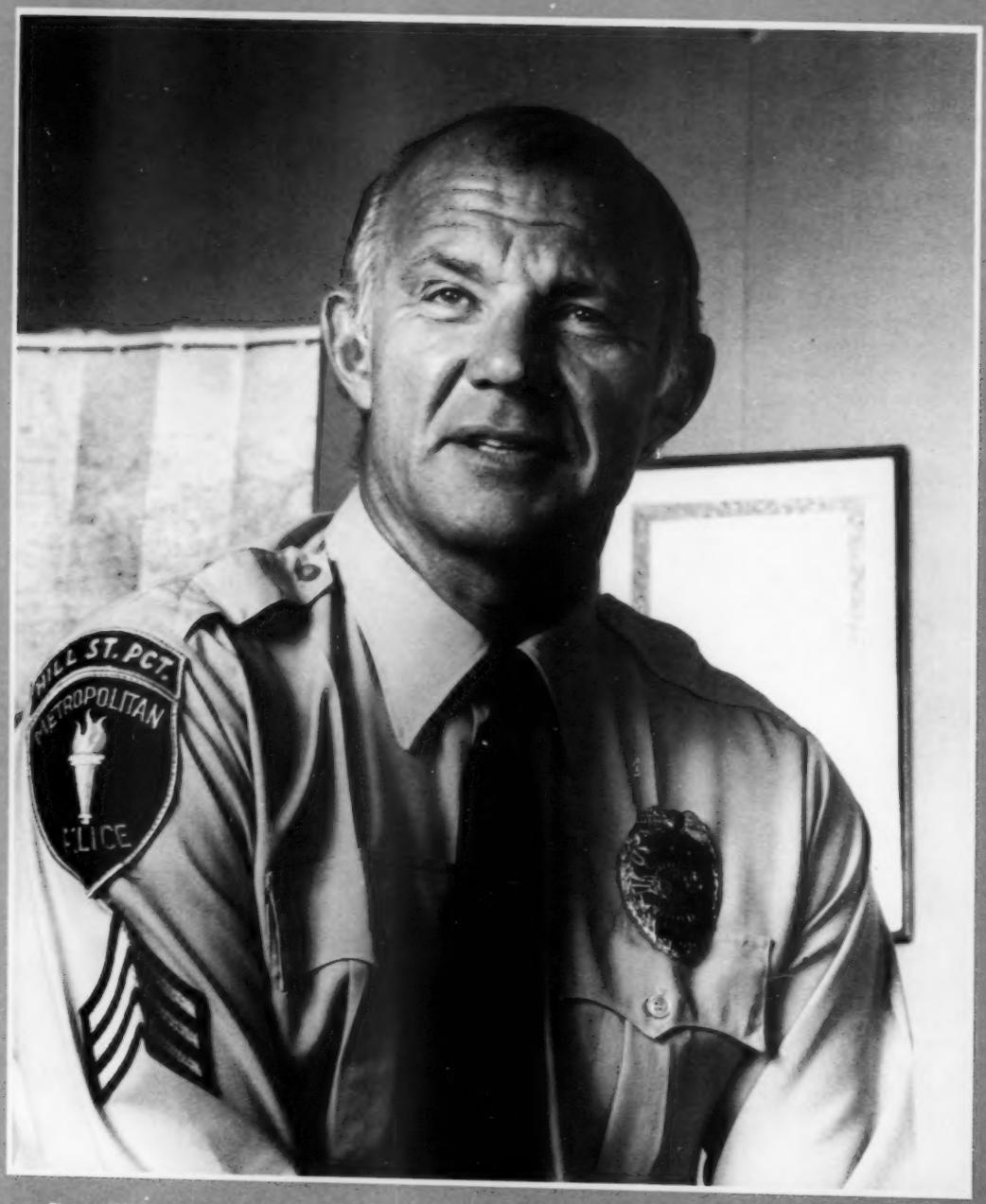

Photo of Michael Conrad as "Sergeant Phil Esterhaus," star of NBC-TV's *Hill Street Blues*, courtesy of NBC-TV, Burbank, California. Idea by SSgt Richard Bell, 41 MAS.